California Department of Water Resources
Division of Flood Management / Hydrology Branch

California Water Conditions Synopsis for November 2003

Cool storms brought near to below average precipitation and snowfall during November, but seasonal totals remain well below average. Statewide river runoff is just under half of average for the water year to date, and statewide reservoir storage remains average. Thunderstorms and severe weather occurred in northern California on November 8 and 9 and in southern California on November 12.

Precipitation during November was 80 percent of average statewide, raising the water year to date precipitation to 60 percent of average. Statewide snow accumulation rose to two thirds of average on December 1, with larger accumulations in the northern mountains. The snowpack now equals 10 percent of the historical average April 1 snowpack, the usual date of peak accumulation. This is 5 percent less than the historical average accumulation of 15 percent of April 1 average on December 1.

Temperatures varied widely during November. Several dozen daily low temperature records and a few high temperature records were set, predominantly in southern California. Snow levels varied from 2,000 to 10,000 feet.

Runoff during November continued at low levels, 40 percent of average statewide, with very low river levels in the coastal regions. The first Water Supply Index forecasts for water year 2003-04 were issued December 5. Assuming median conditions for the remainder of the water year, the forecasted Sacramento River Index is 14.5 MAF, or 76 percent of average. The median forecasted Sacramento Valley Water Year Hydrologic Classification is “Below Normal” and the San Joaquin Valley Water Year Hydrologic Classification is “Dry”.

In response to the Southern California fires, the California Nevada River Forecast Center has incorporated the burn area boundaries into the rainfall estimates and forecast (QPF) products, modeled the rivers with adjusted criteria specifically for the burn areas, and provided flash flood guidance of the burn areas. Federal and State forecasters will use these adjustments to model potential increased runoff from storms over the burn areas this winter.

Reservoir storage in the State’s largest 151 reservoirs decreased to 57 percent of capacity on November 30, about 10 percent more than last year. Storage in most major reservoirs is well below the maximum winter flood control limits.

Long-range weather forecasts remain uncertain. The NWS Climate Prediction Center reports that current oceanic conditions in the tropical Pacific remain slightly above average. They are forecasting a slightly increased chance of below average precipitation for the southern two thirds of the State in the December-February period.